

# Notice of Allowability

Application No.

10/518,516

Examiner

Jack I. Berman

Applicant(s)

NAYLOR-SMITH ET AL.

Art Unit

2881

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 12/20/04, 6/28/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**JACK BERMAN**  
PRIMARY EXAMINER

The following is an examiner's statement of reasons for allowance: No available prior art discloses an end station for an ion implanter comprising a scanning arm having at least first and second rotary joints articulated so as to permit movement of a substrate in two orthogonal scan directions in a scan plane transverse to an ion beam path. Brune et al. (U.S. Patent No. 5,229,615), which was cited by applicant in the Information Disclosure Statement filed on June 28, 2005, discloses an end station for an ion implanter comprising a scanning arm having at least first and second rotary joints (to which arm assemblies 98 and 102 are attached), but this scanning arm is articulated only to adjust the angle of ion implantation in the substrate, not to scan the substrate in two dimensions in a plane transverse to the ion beam. Similarly, Tamai (U.S. Patent No. 6,313,469) also discloses an end station for an ion implanter comprising a scanning arm having at least first and second rotary joints (to which first and second movable arms 21 and 23 are attached), but this scanning arm is articulated so as to scan the substrate one dimensionally across the path of an ion beam that is itself scanned in the orthogonal direction to the scanning path of the substrate (see lines 11-14 in column 7). Graf et al. (U.S. Patent 6,953,942) and Asdigha et al. (U.S. Published Patent Application 2005/0247891) both disclose end stations for ion implanters comprising scanning arms having at least first and second rotary joints articulated so as to permit movement of a substrate in two orthogonal scan directions in a scan plane transverse to an ion beam path, but both of these references are based on applications filed after the filing date of the instant application. In fact, Graf et al. cites the equivalent of the instant application filed with the World Intellectual Property Organization (WO 2004/001789) as a reference. Murrell et al. (U.S. Patent No. 7,049,210) discloses an apparatus that permits movement of a substrate in two orthogonal scan directions in a scan plane transverse to an ion

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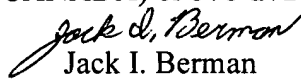
beam path, but this apparatus does not use a scanning arm having at least first and second rotary joints.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (571) 272-2468. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jack I. Berman  
Primary Examiner  
Art Unit 2881

jb  
6/23/06